

## WHAT IS CLAIMED IS:

1       1. An air bag deployment control system, comprising:  
2            a weight sensor which detects weight of an occupant sitting  
3            on a seat of a vehicle; and  
4            a controller which switches between deployment and non-  
5            deployment modes of an air bag based on the occupant weight  
6            detected by the weight sensor;  
7            wherein the controller switches to the deployment mode  
8            permitting deployment of the air bag when the detected weight of  
9            the occupant is equal to or larger than a first threshold value  
10           and switches to the non-deployment mode prohibiting deployment  
11           of the air bag when the detected weight of the occupant is smaller  
12           than a second threshold value; and  
13            the second threshold value for switching from the  
14            deployment mode to the non-deployment mode is set smaller than  
15            the first threshold value for switching from the non-deployment  
16            mode to the deployment mode.

1       2. The air bag deployment control system according to claim  
2       1, further including an acceleration sensor which detects an  
3       acceleration of the vehicle, and said controller further controls  
4       deployment and non-deployment of the air bag based on the detected  
5       acceleration of the vehicle.

1       3. The air bag deployment control system according to claim  
2       1, including a plurality of said weight sensors which detect the  
3       weight of the occupant sitting on the seat, and the controller

4       which switches between deployment and non-deployment modes of an  
5       air bag based on the occupant weight collectively detected by the  
6       weight sensors.

1       4.      The air bag deployment control system according to claim  
2       1, wherein said weight sensor is disposed beneath a sliding rail  
3       of the seat.

1       5.      An air bag deployment control method in which weight of an  
2       occupant sitting on a seat of a vehicle is detected by a weight  
3       sensor, the method comprising the steps of:

4               switching between deployment and non-deployment modes of  
5       an air bag based on the occupant weight detected by the weight  
6       sensor;

7               wherein a switch to the deployment mode which permits  
8       deployment of the air bag occurs when the detected weight of the  
9       occupant is equal to or larger than a first threshold value, and  
10      a switch to the non-deployment mode which prohibits deployment  
11      of the air bag occurs when the detected weight of the occupant  
12      is smaller than a second threshold value ; and

13              the second threshold value for switching the deployment  
14       mode to the non-deployment mode is smaller than the first  
15       threshold value for switching the non-deployment mode to the  
16       deployment mode.

1       6.      The air bag deployment control method according to claim  
2       5, the vehicle includes an acceleration sensor which detects an

3       acceleration of the vehicle, and deployment and non-deployment  
4       of the air bag is further based on the detected acceleration of  
5       the vehicle.

1       7.       The air bag deployment control method according to claim  
2       5, wherein the vehicle includes a plurality of said weight sensors  
3       which detect the weight of the occupant sitting on the seat, and  
4       the switching between deployment and non-deployment modes of an  
5       air bag is based on the occupant weight collectively detected by  
6       the weight sensors.